1320

SEQUENCE LISTING

- 11

<110> The kitasato Institute <120> A strain having C-13 substituted nemadectin producing activity belonging to genus Streptomyces and a method for manufacturing C-13 substituted nemadectin using the same <160> 6 <210> 1 <211> 23 <212> DNA <213> Streptomyces avermitilis <400> 1 23 gtgctgcaag gcgattaagt tgg <210> 2 <211> 22 <212> DNA <213> Streptomyces avermitilis <400> 2 22 tccggctcgt atgttgtgtg ga <210> 3 <211> 39912 <212> DNA <213> Streptomyces avermitilis <400> 3 gaattottog goatcagood cogogaagoo ctogocatgg accoccagoa acgactooto 60 120 ctogaaaccg cotgggaaac catogaacac googgcatca accoccacac cotocacggo 180 acccccaccg gagtettege eggaateaac geteaagace acgcegegea tateegeeaa 240 agccgtgatg tggagaccat cgagggctac gccctgaccg gcagttcggg aagtgtggcg 300 tccggccggg tggcctacac gctcgggctc gaaggccccg cggtgtcggt ggatacggcg tgttcgtcgt cgttggtggc gttgcattgg gcggcgcagg cgttgcgtgc gggtgagtgt 360 420 togatggcgc ttgccggggg tgtgacggtg atgtcgtctc cgggtacgtt tgtggagttc 480 teacgteage ggggtetgge egeggaeggg eggtgeaagg cetattegge ggetgetgae 540 ggtaccggct gggccgaggg tgtggggatg ctgctggtgg agcggctctc cgacgcccgt 600 cgcaacggtc accgtgtcct ggccgtggtg cgtggcagtg cggtcaacca ggacggtgcg 660 agcaacggtc tgaccgcgcc caacgggccc tcccagcagc gtgtcatccg tcaggccctg 720 gccaatgcgg gactgacccc ggccgatgtc gacgcagtgg agggccacgg caccgggacc 780 actotggggg accogatoga ggcccaggca ctcctggccg cctacggaca acaccgcccc 840 caccaccgcc ccttgtggct gggatccctc aaatccaaca tcgggcacgc acaggccgcc 900 gcgggcgtgg gcggagtcat caagatggtg atggccctgc gcaacgggct gctgccacag accetecacg tggacgagee caccececag gtegactggt ceacaggege agtacaacte 960 1020 ctgacacaac cggtgccctg gcccgccgac ccggccggcc ggccacgcca cgccggcgtg 1080 teateatteg gegteagegg caccaaegee cacateatee tegaagaage acceaeteee caggacageg atacegacga egaacegeet gecaaegeae cagecetgee ceateceete 1140 1200 cctcttcccg tgccggtgtc ggcgaggtct gaggccgggt tgcgggcgca ggcacaggcg 1260 ttgcgccagt acgtggcagc ccgcccggac atgtcacctg ccgacattgg tgcgggtctg

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